

TABLE 4 . DETAILED EVALUATION OF ALTERNATIVES

CRITERIA AND DESCRIPTION	ALTERNATIVE 1: BUILDING DEMOLITION, CAPPING, AND INSTITUTIONAL CONTROLS	ALTERNATIVE 2: BUILDING DEMOLITION, IN-SITU SOLIDIFICATION/STABILIZATION, AND INSTITUTIONAL CONTROLS	ALTERNATIVE 3: DEFERRED BUILDING DEMOLITION, EXCAVATION, OFF- SITE DISPOSAL, AND INSTITUTIONAL CONTROLS	ALTERNATIVE 4: BUILDING DEMOLITION, EXCAVATION, OFF-SITE DISPOSAL, AND INSTITUTIONAL CONTROLS	ALTERNATIVE 5: BUILDING DEMOLITION, EXCAVATION, OFF-SITE INCINERATION, AND INSTITUTIONAL CONTROLS
THRESHOLD REQUIREMENTS					
Protect human health and the environment	PCBs remain on site but contained; land use restricted	PCBs remain on site but demobilized and contained; land use restricted	PCB contaminated soil above cleanup levels except for those underneath the building removed and contained off-site.	PCB contaminated soil removed from the site and contained off-site.	PCB contaminated soil removed from the site and destroyed off-site.
Comply with cleanup standards	Cleanup levels will not be met at the point of compliance. Cleanup standards will be complied with under WAC 173-340-740(6)(f).	Cleanup levels will not be met at the point of compliance. Cleanup standards will be complied with under WAC 173-340-740(6)(f).	Cleanup levels will be met at the point of compliance.	Cleanup levels will be met at the point of compliance.	Cleanup levels will be met at the point of compliance.
Comply with applicable state and federal law	Meets all ARARs.	Meets all ARARs.	Meets all ARARs.	Meets all ARARs.	Meets all ARARs.
Provide for compliance monitoring	Protection monitoring during site work will be conducted.	Protection monitoring during site work will be conducted.	Soil sampling will be conducted to verify that cleanup levels are met. Protection monitoring will be conducted during excavation and loading.	Soil sampling will be conducted to verify that cleanup levels are met. Protection monitoring will be conducted during excavation and loading.	Soil sampling will be conducted to verify that cleanup levels are met. Protection monitoring will be conducted during excavation and loading.
OTHER REQUIREMENTS					
Use permanent solutions to the maximum extent practicable					
1. <i>Protectiveness</i>					
<i>Degree of risk reduction</i>	Exposure to PCBs in soils eliminated.	Exposure to PCBs in soils eliminated. Mobility of PCBs is reduced	Exposure to PCBs in soils is eliminated. Future potential migration of PCBs to GW is eliminated. Possible PCBs in soils underneath the building may be left on site.	Exposure to PCBs in soils is eliminated. Future potential migration of PCBs to GW is eliminated.	Exposure to PCBs in soils is eliminated. Future potential migration of PCBs to GW is eliminated.
<i>Time required to reduce risk and attain cleanup standards</i>	Risks to exposure to PCBs reduced after capping and institutional controls are in place. Cleanup levels will not be met at the point of compliance.	Risks to exposure to PCBs reduced after solidification/stabilization and after deed restrictions are in place. Cleanup levels will not be met at the point of compliance.	Risks to exposure to PCBs in soils and to potential future migration of PCBs in GW reduced. Cleanup levels will be met at the point of compliance.	Risks to exposure to PCBs in soils and to potential future migration of PCBs in GW reduced. Cleanup levels will be met at the point of compliance.	Risks to exposure to PCBs in soils and to potential future migration of PCBs in GW reduced. Cleanup levels will be met at the point of compliance.
<i>On-site and off-site risk</i>	None	Exposure risk during mixing with solidification agents.	Exposure to dust and/or vapors during excavation and loading. Off-site transport risks.	Exposure to dust and/or vapors during excavation and loading. Off-site transport risks.	Exposure to dust and/or vapors during excavation and loading. Off-site transport risks.
<i>Overall improvement of environmental quality</i>	PCBs remain on site but contained; land use restricted	PCBs remain on site but demobilized and contained; land use restricted	PCBs on site are below industrial cleanup levels; land use restricted. PCBs contained off-site.	PCBs on site are below cleanup industrial levels; land use restricted. PCBs contained off-site.	PCBs on site are below cleanup industrial levels; land use restricted. PCBs destroyed off-site..

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2. Permanence					
<i>Degree of permanently reducing the toxicity, mobility, or volume of PCBs</i>	No reduction of toxicity, mobility or volume of PCBs.	Mobility of PCBs are reduced.	Volume of PCBs on site greatly reduced. PCBs are contained on site.	All PCB contaminated soils on site above cleanup levels are removed and contained on site.	All PCB contaminated soils on site above cleanup levels are removed and PCBs are destroyed off-site.
<i>Adequacy of alternative in destroying PCBs</i>	No PCBs destroyed.	Some PCBs may be destroyed but not all.	PCBs are not destroyed but contained off-site.	PCBs are not destroyed but contained off-site.	PCBs are destroyed.
<i>Reduction or elimination of PCB releases and sources of releases</i>	PCBs are contained and still present future potential for migration to ground water	PCBs are solidified with soil, future potential for migration to ground water reduced.	PCB-contaminated soil above cleanup levels removed from the site eliminating PCB releases and sources of releases.	PCB-contaminated soil above cleanup levels removed from the site eliminating PCB releases and sources of releases.	PCB-contaminated soil above cleanup levels removed from the site eliminating PCB releases and sources of releases.
<i>Degree of irreversibility of treatment</i>	No treatment - not applicable	Partial treatment only.	No treatment.	No treatment.	PCBs are incinerated/destroyed.
<i>Characteristic and quantity of treatment residuals generated</i>	No treatment - not applicable	Stabilized soil mass.	No treatment.	No treatment.	Off-gas from incinerator treated by the facility.
3. Cost (See Table13)					
4. Long-term effectiveness					
<i>Degree of certainty that alternative will be successful</i>	Cap provides reliable containment; not a permanent remedy	Effective containment/immobilization of PCBs; not a permanent remedy	PCB contaminated soils removed from site. High degree of success.	PCB contaminated soils removed from site. High degree of success.	PCB contaminated soils removed from site. High degree of success.
<i>Reliability of the alternative during the period of time PCBs remain on site that exceed cleanup levels</i>	Controls required; reliability depends on continued maintenance and enforcement.	Controls required; reliability depends on continued maintenance and enforcement.	PCB cleanup levels will be met at the point of compliance (except for those that may still exist under the building.)	PCB cleanup levels will be met at the point of compliance.	PCB cleanup levels will be met at the point of compliance.
<i>Magnitude of residual risk</i>	PCBs remain on site but contained.	PCBs remain contained and immobilized.	Some PCBs may still be underneath the building; however, they are contained and covered.	No risks based on industrial use remain.	No risks based on industrial use remain.
<i>Effectiveness of controls required to manage treatment residues or remaining wastes</i>	Institutional controls and periodic inspection and maintenance of the cap required.	Institutional controls must continue to be enforced.	Deed restrictions will limit site use.	Deed restrictions will limit site use.	Deed restrictions will limit site use.
5. Management of short-term risks					
<i>Risk associated during the construction and implementation</i>	Minimal disturbance. No excavation or off-site transport.	Fugitive dust or possibly vapor hazard during mixing of solidification agent with soil	Fugitive dusts, off-site transport risks.	Fugitive dusts, off-site transport risks.	Fugitive dusts, off-site transport risks.
<i>Effectiveness of measures that will be taken to manage risks.</i>	Worker protection to be achieved with standard safety practices.	Dust or vapor hazards mitigated by dust control and other measures.	Effective dust control and other safety measures are available.	Effective dust control and other safety measures are available.	Effective dust control and other safety measures are available.
6. Implementability					
	Capping is conventional technology that is readily installed/maintained.	Solidification/Stabilization is a demonstrated technology and can be implemented. Available site area may be a constraint.	Excavation/off-site disposal easily implemented. TSCA-permitted landfill is available within 200 miles.	Excavation/off-site disposal easily implemented. TSCA-permitted landfill is available within 200 miles.	Excavation/ off-site incineration readily implemented. Off-site incinerators are available.

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<i>7. Public concerns consideration</i>	Will address public comments.	Will address public comments.	Will address public comments.	Will address public comments.	Will address public comments.
Provide for reasonable restoration time frame	PCBs are not destroyed; just contained and not expected to undergo natural degradation. This does not provide for a reasonable restoration time frame.	PCBs are contained and immobilized. Ranks a little higher than Alternative Does not provide for a reasonable restoration time frame.	Cleanup levels are met. Provides for a reasonable restoration time frame.	Cleanup levels are met. Provides for a reasonable restoration time frame.	Cleanup levels are met. Provides for a reasonable restoration time frame.
Consider public concerns	Public comment will be addressed during the public review and comment period for the draft FS Report and the draft CAP.	Public comment will be addressed during the public review and comment period for the draft FS Report and the draft CAP.	Public comment will be addressed during the public review and comment period for the draft FS Report and the draft CAP.	Public comment will be addressed during the public review and comment period for the draft FS Report and the draft CAP.	Public comment will be addressed during the public review and comment period for the draft FS Report and the draft CAP.
Ecology Expectations	Would not meet expectation that for sites containing small volumes of hazardous substances, the hazardous substances will be destroyed, detoxified, and/or removed to concentrations below cleanup levels	Would not meet expectation that for sites containing small volumes of hazardous substances, the hazardous substances will be destroyed, detoxified, and/or removed to concentrations below cleanup levels	Would partially meet expectation that for sites containing small volumes of hazardous substances, the hazardous substances will be destroyed, detoxified, and/or removed to concentrations below cleanup levels.	Would meet expectation that for sites containing small volumes of hazardous substances, the hazardous substances will be destroyed, detoxified, and/or removed to concentrations below cleanup levels.	Would meet expectation that treatment technology will be emphasized and that for sites containing small volumes of hazardous substances, the hazardous substances will be destroyed, detoxified, and/or removed to concentrations below cleanup levels